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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/526,565

04/05/2005

Siamak Naghian

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8011

32294 7590 11/28/2007  
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EXAMINER

TRAN, PABLO N

ART UNIT

PAPER NUMBER

2618

MAIL DATE

DELIVERY MODE

11/28/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/526,565

Applicant(s)

NAGHIAN, SIAMAK

Examiner

Pablo N. Tran

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) 6 and 33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-32 and 34-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-5, 7-11, 13-15, 19-25, and 27-29, 31-32, and 34-36 are rejected under 35 U.S.C. 102(e) as being anticipated by Chen (6,744,740).

As per claims 1, 21, and 36, Chen discloses a method of routing a message from a source node to a destination node in a wireless network, wherein transmitting a first message from the source node to the destination node, receiving said first message at said destination node, transmitting a second message from said destination node in response to the first message and, wherein at least one of said first message and said second message is sent between the source and destination nodes via a plurality of paths and wherein at least one of the plurality of paths comprises at least one intermediate node, selecting a path from the plurality of paths for communication between the source node and the destination node based at least in part on a propagation delay of the path and wherein the propagation delay is a time taken for at

least one of said second and first messages to propagate between each node on the path (fig. 12A-12D, col. 8/ln. 33-45, col. 9/ln. 44-col. 11/ln. 2, furthermore as stated in the specification [0041] at least one method of estimating the propagation delay is time stamping. Where it is clear that Chen teaches such method).

As per claims 2-3, 22, and 32, as stated above in claim 1, Chen further discloses the propagation delay is obtained at least in part by time stamping (TABLE2, col. 8/ln. 33-45, col. 9/ln. 44-col. 11/ln. 2).

As per claims 4-5, 7, 23, 31, and 34, as stated above in claim 1, Chen further discloses the propagation delay is obtained by calculating an actual time, stored the actual time, and summing the actual time (TABLE2, col. 8/ln. 33-45, col. 9/ln. 44-col. 11/ln. 2).

As per claims 8-9 and 24, as stated above in claim 1, Chen further discloses measuring and stored a signal quality and selecting the path based at least in part on the measured signal quality (col. 4/ln. 40-52, col. 5/ln. 1, col. 5/ln. 46, col. 14/ln. 20-21, col. 14/ln. 34-35).

As per claims 10-11, 25, and 35, as stated above in claim 1, Chen further discloses calculating and stored a distance and selecting the path based at least in part on the calculated distance (col. 4/ln. 40-52, col. 4/ln. 65, col. 5/ln. 5-16).

As per claims 13 and 27, as stated above in claim 1, Chen further discloses measuring power attributes and selecting the path based at least in part on the measured power attributes (col. 4/ln. 40-52, col. 7/ln. 21-31).

As per claims 14 and 28, as stated above in claim 1, Chen further discloses assessing a link stability and selecting the path based at least in part on the assessed link stability (col. 4/ln. 40-52, col. 7/ln. 21-31, col. 14/ln. 20-21, col. 14/ln. 34-35).

As per claims 15 and 29, as stated above in claim 1, Chen further discloses assessing a required QOS stability and selecting the path based at least in part on the assessed QOS (col. 4/ln. 40-52, col. 7/ln. 21-31, col. 14/ln. 20-21, col. 14/ln. 34-35, col. 14/ln. 28-31).

As per claim 19, as stated above in claim 1, Chen further discloses an adhoc wireless network (col. 1/ln. 41).

As per claim 20, as stated above in claim 1, Chen further discloses the intermediate node is a mobile station (fig. 1, col. 3/ln. 45-65).

As per claim 30, as stated above in claim 1, Chen further discloses the claimed limitation (col. 4/ln. 40-52, col. 7/ln. 21-31, col. 14/ln. 20-21, col. 14/ln. 34-35, col. 14/ln. 28-31).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 12, 16, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen (6,744,740) in view of Chuprun et al. (6,115,580).

As per claims 12, 16, and 26, Chen suggested such method of optimal path based upon various criteria but not explicitly based upon velocity. However, Chuprun et al. taught such method (col. 11/ln. 38-42). Therefore, it would have been obvious to one of ordinary skill at the time of invention for the Chen to utilize such method, as taught by Chuprun et al., in order to enhance connectivity in a wireless communications network by intelligently selecting the wireless links that provides the optimal connections between nodes in the network.

5. Claims 17-18 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen (6,744,740) in view of Baratz et al. (4,873,517).

As per claim 17, as stated above in claim 1, Chen further discloses such selection process to select the optimum route based upon RSSI, shortest time, least number of hop, distance, or some other measured metrics but not explicitly placing a weight value which is used for the selection process. Baratz et al. teaches such method (fig. 4, fig. 5, col. 4/ln. 48- col. 5/ln. 53). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention for Chen to utilize such teaching of Baratz et al. in order to reduce time in selecting the optimum route.

As per claims 18 and 30, as stated above in claim 1, Chen further discloses such selection process to select the optimum route based upon RSSI, shortest time, least number of hop, distance, or some other measured metrics but not explicitly a mapping value that indicate a degree to which a measured parameter value meets a predefined parameter value. Baratz et al. teaches such method (fig. 4, fig. 5, col. 4/ln. 48- col. 5/ln. 53). Therefore, it would have been obvious to one of ordinary skill in the art at the time

of invention for Chen to utilize such teaching of Baratz et al. in order to reduce time in selecting the optimum route.

***Response to Arguments***

6. Applicant's arguments filed 10/16/07 have been fully considered but they are not persuasive.

The Applicant's stated that, "Chen does not teach, suggest, or describe use of a propagation delay". In response to the Applicant, see examiner' remark as stated above in claim 1.

7. Applicant's arguments with respect to claims 17-18 and 30 have been considered but are moot in view of the new ground(s) of rejection

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

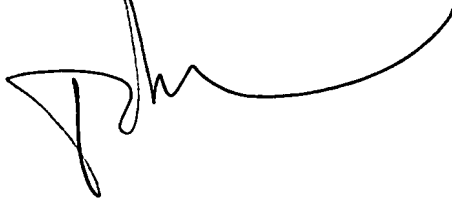
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Conclusion***

8. Applicant's arguments with respect to claims 17-18 and 30 have been considered but are moot in view of the new ground(s) of rejection. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pablo Tran whose telephone number is (571)272-7898. The examiner's normal hours are 9:30 -5:00 (Monday-Friday). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (571)272-7899. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) System. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**PABLO N. TRAN**  
**PRIMARY EXAMINER**



AV2618

November 21, 2007